

CLAIMS:

1. A method of producing an image on a printing screen comprising the steps of:
 - a) coating the printing screen with a water soluble blocking agent;
 - b) providing a curing agent that can interact with the blocking agent to create insoluble agents;
 - c) selectively applying the curing agent to the blocking agent in an image wise manner where the image becomes water insoluble; and
 - d) washing away uncured blocking agent.
2. The method as defined as defined in claim 1 wherein the curing agent can further interact with its local environment to create insoluble agents.
3. The method as defined in claims 1 or 2 wherein the insoluble agents are strengthening agents.
4. The method as defined in claims 1, 2 or 3 wherein the insoluble agents act to inhibit the diffusion of the curing agent.
5. The method as defined in claims 1, 2 or 3 wherein the blocking agent is a screen emulsion.
6. The method as defined in claims 1, 2 or 3 wherein the blocking agent is a photopolymer screen emulsion.
7. The method as defined in claims 1, 2 or 3 wherein the blocking agent is an SBQ photopolymer emulsion.

8. The method as defined in claim 1 wherein curing is effected by a redox process.
9. The method as defined in claim 1 wherein the curing agent is a reducing agent.
10. The method as defined in claim 1 wherein the curing agent is a ferrous ion (FeSO_4).
11. The method as defined in claim 1 wherein curing is effected by selectively providing combinations of two or more interacting curing agents.
12. The method as defined in claim 11 wherein the combinations of interacting curing agents interact with themselves to create additional insoluble agents.
13. The method as defined in claims 11 or 12 wherein the curing agents can interact with their local environment to create additional insoluble agents.
14. The method as defined in claims 11, 12 or 13 wherein the insoluble agents are strengthening agents.
15. The method as defined in claims 11, 12 or 13 wherein the insoluble agents act to inhibit the diffusion of the curing agents.
16. The method as defined in claim 11 wherein at least one of the curing agents is provided by photons.

17. The method as defined in claim 16 wherein the photons are provided by an LED module.
18. The method as defined in claim 11 wherein the curing agents are chemical agents provided by an inkjet printer.
19. The method as defined in claim 11 wherein the curing is effected by chemical curing agents on selected portions of the screen and by chemical curing agents in combination with photons for another part of the screen.
20. The method as defined in claim 19 wherein the image is provided by a computer to screen imaging system.
21. The method as defined in claim 6 wherein the photopolymer screen emulsion was filtered to remove insoluble particles prior to coating the printing screen.
22. A method of producing an image on a printing screen comprising the steps of selectively depositing a diluted and filtered photopolymer emulsion on the printed screen; and curing the selectively deposited image with a curing agent.
23. The method as defined in claim 22 wherein the curing agent creates, collocates and incorporates additional insoluble particulate by the interaction of the curing agent with the blocking agent at the location where the blocking agent becomes water insoluble.
24. The method as defined in claim 22 wherein the curing agent is a ferrous ion.

25. The method as defined in claim 22 where the diluted and filtered photopolymer emulsion is heated prior to deposition.
26. The method as defined in claim 24 wherein the ferrous iron is a mixture of one part diluted FeSO_4 and 1 part $\text{C}_2\text{H}_5\text{OH}$.
27. The method as defined in claim 26 wherein the diluted FeSO_4 is 1:25 $\text{FeSO}_4:\text{H}_2\text{O}$.
28. The method as defined in claim 25 wherein the diluted and filter polymer emulsion and the ferrous ion are deposited using an inkjet printing process.
29. The method as defined in claim 28 wherein the inkjet printing process selectively deposits the emulsion and ferrous ion based on a computer to screen imaging system.
30. A method of producing an image on a printing screen comprising:
- a) providing a curing agent that can interact with a blocking agent to create insoluble agents
 - b) premixing the curing agent with a photopolymer emulsion; and
 - c) selectively depositing the curing agent and emulsion on said printing screen wherein said emulsion is self curing on placement on the screen.
31. The method as defined in claim 30 wherein the curing agent is capable of interacting with the blocking agent to create additional insoluble agents.
32. The method as defined in claims 30 or 31 wherein the curing agents can further interact with the local environment to create additional insoluble agents.

33. The method as defined in claims 30, 31 or 32 wherein the insoluble agents are strengthening agents.
34. The method as defined in claims 30, 31 or 32 wherein the insoluble agents inhibits the spread of the emulsion.
35. The method as defined in claim 30 wherein two or more curing agents are premixed with the photopolymer emulsion, the curing agents being capable of interacting with themselves or the blocking agent to create additional insoluble agents.
36. The method as defined in claim 35 wherein the curing agents can further interact with a local environment to create additional insoluble agents.
37. The method as defined in claim 30 wherein the emulsion comprises a diluted and filtered photopolymer.
38. The method as defined in claim 30 wherein the curing agent is a ferrous ion.
39. The method as defined in claim 30 wherein the emulsion and curing agent are maintained in an oxygen deficient environment prior to deposition.
40. The method as defined in claim 39 wherein said oxygen deficient environment is an inkjet printing module and said self curing emulsion is selectively deposited using an inkjet printing process.

41. The method as defined in claim 40 wherein the inkjet printing process selectively deposits the self curing emulsion based on a computer to screen imaging system.